

DEFENSE SPENDING AND THE ECONOMY

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Mr. Chairman, I am pleased to appear before you today to discuss the economic outlook and the influence of rising defense budgets on that outlook.

In the First Concurrent Resolution on the Budget for Fiscal Year 1984, the Congress provided for annual real growth in defense budget authority of 5 percent a year through 1986. CBO's most recent economic forecast, released last August, assumed these defense increases and the other fiscal policies of the first resolution. Our forecast projects continued growth in the economy and moderate inflation for one or possibly two years, despite federal deficits that are very large by historical standards.

Earlier Administration budgets have proposed even more defense spending and less nondefense spending than provided in the resolution. Additional emphasis on defense would, of course, promote defense-intensive sectors of the economy at the expense of others, but CBO believes the economy could accommodate such shifts without significant adverse effects on macroeconomic variables such as employment and long-term productivity gains. Thus, the choice of a mix of defense and nondefense spending must depend on a political judgment about whether added defense spending contributes enough to national security to justify its direct cost.

From the economic standpoint, the question is not the desired level of defense spending but how it is financed: whether by running higher deficits, by reducing federal nondefense spending, or by increasing taxes.

DEFENSE NEED NOT REKINDLE INFLATION SOON

Outlook Favorable in Next Year or Two

In 1983 the economy has grown briskly, at about an average pace for a cyclical recovery, and inflation has been moderate. We expect further noninflationary growth for another year or two.

Specifically, CBO projects that real gross national product (GNP) will be up about 6 percent in 1983 (fourth-quarter 1983 over fourth-quarter 1982) and about 4-1/2 percent in 1984. That growth, in our opinion, will help lower civilian unemployment from an average rate of about 9-1/2 percent in calendar year 1983 to about 8 percent in 1984. Unemployment last month already was down to 8.4 percent.

The recovery has not rekindled inflation, and we expect prices to continue rising only moderately during 1984. Our forecast shows inflation edging up from about 4-1/2 percent in 1983 to about 5 percent in 1984. The small rise projected for 1984 reflects increases in Social Security taxes, assumed declines in the foreign-exchange value of the dollar, some strengthening of weaker labor markets, and partial recoveries in prices of some basic commodities, principally foods and fuels. The forecast does not foresee acceleration of inflation in large numbers of markets or industries.

Sharp increases in defense spending could increase inflation if they contributed to bottlenecks in major industries. But our projections suggest

this is unlikely. In 1984 and 1985, capacity use in major defense-intensive industries--which are primarily manufacturing industries--is expected to be well below peak rates achieved in years when inflation was accelerating (see the table). In aerospace and shipbuilding, for example, we project that capacity use in 1985 will reach 83 percent, compared with 91 percent both in 1979 and in 1966 during the Vietnam period. In manufacturing as a whole, we project that capacity use in 1985 will just reach its historical average of 83 percent, below peak rates of 86 percent in 1978 and 91 percent in 1966.

Capacity use will remain below peak rates even though the economy is recovering somewhat faster than we anticipated earlier this year. Indeed, in the sectors most strongly affected by defense, such as aerospace and shipbuilding, we now project slightly lower capacity use than we did in our February 1983 forecast. This stems from the slower growth in defense spending proposed by the First Budget Resolution. In most other sectors--which depend predominantly on nondefense business--we see higher capacity use. For example, we now foresee much higher capacity use in the iron and steel industry, but still far from levels that suggest bottlenecks.

Early in the new year, CBO will revise its forecast to reflect recent economic events and final Congressional action on the 1984 budget. Among other things, the Congress cut about \$5 billion from the first budget resolution's 1984 target for defense budget authority.

Outlook Favorable Despite Large Deficits

The economic outlook for the next year or so appears favorable despite federal deficits that are high by historical standards. The first budget resolution called for spending cuts and tax increases that would reduce deficits substantially. Under that resolution, CBO projected that the deficit would be about \$180 billion in fiscal 1984 and \$140 billion in 1986. The high-employment deficit--that is, the deficit calculated at 6 percent unemployment--would stay near \$100 billion.

But these estimates assumed legislative actions that would substantially cut deficit levels below those implied by current law. As things now stand, deficits will remain near \$200 billion through 1986.

DEFICITS POSE THE KEY LONG-RUN RISK

Deficits of this magnitude do not provide a permanent means of financing spending increases, and they threaten to crowd out private capital formation. We now borrow to cover not only some of the expenditures on current programs but also to finance the interest bill on the outstanding federal debt. The ratio of federal debt to GNP is soaring, and if interest rates remain constant the interest bill will also rise faster than GNP. This clearly cannot go on forever. More immediately, we face the risk that federal debt will displace private debt and equity holdings in the market for funds, thereby decreasing investment in productive capital. Ultimately we

have no choice but to raise taxes or to cut spending by enough to bring the budget sufficiently near balance to stabilize the debt-to-GNP ratio. Not facing up to this problem now only postpones the inevitable.

Deficits also may complicate countercyclical monetary policy. For example, the Federal Reserve could respond to large deficits and heavy government borrowing by increasing growth of the money supply to curb rising interest rates, thereby fueling inflation. Or--what seems more likely, given Chairman Volcker's statements--it could restrain growth in money to fight inflation, thereby risking sharp increases in interest rates.

The risks of sparking inflation or high interest rates would increase sharply if the economy recovered faster than we forecast. Suppose, for example, that real GNP in 1984-1986 expanded at 5 percent a year. Then, in 1986, unemployment would fall below 7 percent. And capacity use in manufacturing would move into the 85-88 percent range, comparable to rates achieved in the 1973-1974 and 1978-1979 periods of higher inflation.

Of course, these risks have to do with overall budgetary policy, not just defense. Even if defense budget authority for 1984 to 1986 were to have no real growth over the 1984 level--rather than the 5 percent assumed here--unemployment, capacity use, and the deficit would not change dramatically. Capacity use in manufacturing, for example, would be about 1 percent lower in 1986. Unemployment rates would probably not change more than small fractions of a percent. The 1986 deficit would fall about \$15 billion.

This is not to argue that defense, which under our projections will account for about 30 percent of federal outlays in 1986, should escape careful scrutiny. All spending needs close scrutiny, especially in a period of fiscal stringency.

THE ECONOMIC IMPACT OF HIGHER DEFENSE SPENDING

My testimony thus far has focused on the defense spending plans and other policies assumed in the First Concurrent Resolution. The Administration may, as it did in its January 1983 budget, propose higher defense spending and less nondefense spending. In certain industries, higher defense spending would pose risks of spot shortages that could drive up weapons prices. But higher defense spending would not greatly affect overall employment. Nor should higher defense spending significantly retard gains in productivity.

Defense Bottlenecks May Raise Weapons Costs

Rapidly growing defense spending could cause spot shortages in some industries that focus heavily on defense. Last February we projected that, to satisfy defense and nondefense demands, production in 36 of 100 industries (in the four-digit Standard Industrial Classification), would have to rise to "unusually high" levels by 1986. (Unusually high means more than one standard deviation above the industry's trend production.) These 36

narrowly defined industries are predominantly in the areas of aerospace, specialty metals, electronics and instruments, and metal fabricating, particularly forgings. Our forecasts anticipate gradual increases in their capacity. However, large capacity increases might occur in the face of sharply higher demand, and to the extent that they did, the potential for spot shortages would be less than we have forecast.

In any event, such spot shortages probably would have minimal effects on the overall economy, but they might have effects on weapons costs. The 36 defense-intensive industries mentioned above accounted for only 3.7 percent of GNP in 1981, but their defense production represented almost 40 percent of total defense purchases from industry.

The above analysis is based on the Administration's January 1983 budget plan and CBO's February forecast. Since then, the Congress has cut 1984 defense spending authority, while the economy has grown faster than we anticipated. We will update our forecast in coming weeks, but we do not believe that doing so will significantly change the analysis.

Employment Impacts

Some critics of increased defense spending argue that it will have adverse effects on employment. But this argument does not find much support in economic research. In the long run, total employment seems to be determined primarily by the size of the labor force.

In the short run, large econometric models suggest that increases in overall defense or nondefense spending on goods and services have about the same effect on total employment. Simulations using the models of Data Resources Incorporated and Wharton Econometric Forecasting Associates bear this out. These same models predict somewhat smaller short-run employment gains from tax cuts or increases in federal transfers.

Recent economic analysis suggests that more government spending financed by higher government debt may not increase aggregate employment as much as shown by the models for three reasons. First, as economic activity begins to expand in the sectors stimulated by increased government spending, interest rates begin to rise if money growth is held constant. This can crowd out other forms of economic activity and employment. (In monetarist theory, the offset is almost complete within a very short time period.) Second, the same interest rate increase attracts foreign capital which, under flexible exchange rates, bids up the value of the dollar and decreases employment in export industries and in industries competing with imports. Third, the deficit has recently reached such alarming proportions that further increases could raise fears regarding the long-term health of the U.S. economy; this could inhibit business from making the long-term investments so necessary to continued economic growth. The negative impact on investment could, in other words, be greater than that which would be expected to result from normal "crowding out."

The economics profession is now in the midst of an intense debate as to whether standard models reflect these phenomena adequately. Whatever the outcome of this debate, it is unlikely to affect the comparison between the employment effects of defense and nondefense purchases. All the theories find that shifts between defense and nondefense purchases have only negligible employment effects.

More generally, it should be noted that many forms of defense spending have very similar counterparts in the nondefense budget. It would be surprising if the construction of aircraft runways had macro-economic effects very different from the construction of highways; or if an increase in military retired pay had effects very different from an increase in Social Security; or if increased Pentagon hiring had effects different from increased employment in nondefense departments of the government.

Private Production Will Slow, But Productivity Gains

Need Not Slow Significantly

There is one major difference between the defense and nondefense budgets. Defense budgets are more heavily weighted toward purchases of goods and services, and relatively light on transfer payments.

Economists often refer to government purchases of goods and services as being "exhaustive," that is to say, as directly depriving the private sector of labor and material resources. This does not argue against such purchases

if the government can put the resources to public uses that are more efficient than their private uses. Transfer payments, on the other hand, are not exhaustive. They simply transfer the power to buy goods and services from one group to another. They may, as a side effect, create disincentives to work and save, thus indirectly reducing the supply of productive resources to the private sector; but the size of this effect is a matter of great controversy. There is no doubt, however, that increased purchases of goods and services caused by higher defense spending would decrease productive resources available to the private sector.

In the short run, higher defense spending could also slow commercial research and development (R&D), an important factor in productivity gains. In the longer run, effects of defense spending on productivity growth should be negligible.

Productivity gains in the private sector--defined as growth in output per worker--could be adversely affected if increases in defense purchases draw off or begin to exhaust R&D resources. Defense spending demands a disproportionate share of scientists and engineers working on R&D. In 1981, defense spending amounted to about 6 percent of GNP but used about 25 percent of all such scientists and engineers. Thus a sharp rise in defense spending could, in the short run, reduce the number of skilled R&D workers available in the nondefense sector and hence slow commercial R&D and productivity.

In the long run, a shift toward more defense spending would probably have negligible effects on productivity growth. As the wages of scientists and engineers rose, any shortage should be offset as colleges and universities provided more graduates. Moreover, defense production sometimes yields innovations benefiting private-sector productivity and possibly stimulating derivative innovations in the private sector. Examples of defense-supported developments benefiting private productivity include jet engines and computers.

CONCLUSION

Nothing in my testimony should obscure the fact that defense spending imposes a major cost on the economy. It clearly deprives the private sector and the nondefense public sector of resources that could be used for other productive purposes. It is up to the Congress to decide whether this cost is necessary in order to enhance our national security.

Moreover, this testimony did not examine whether the resources consumed by the defense effort are being used in the most efficient manner possible. That is to say, the analysis did not ask whether the same degree of national security could be purchased with fewer resources than are consumed by current spending levels or whether, with some change in the composition of spending, more national security could be purchased with the same total expenditure.

Our analysis does suggest that, if national security requires, the economy can support the defense buildup envisioned in the first budget resolution. Under that buildup, defense in 1986 would consume about 7 percent of GNP, a level well below the peacetime highs achieved since World War II. Moreover, the economy can sustain this buildup with little risk of rekindling inflation, at least in the next few years.

The analysis also strongly suggests that in making difficult decisions about defense spending, the Congress need not be concerned that a given increase in defense purchases will have a very different impact on employment, inflation, or other macroeconomic variables than an equal increase in nondefense purchases. Everything that we know suggests that, within the range of the options now being proposed, the effects are similar.

Whatever the level of defense spending, a key question for the economy is how to pay for the buildup. Ultimately, the Congress must pay for it by reducing resources devoted to other areas--taking them either from the private sector through increased taxes or from the public sector through further reductions in nondefense spending, or both. The longer the Congress continues to finance the buildup through growing federal deficits, the greater the risk of slowing long-run economic growth.

CAPACITY UTILIZATION IN DEFENSE-INTENSIVE INDUSTRIES: PAST AND PROJECTED (In percent)

	Average 1948-1980	Annual Peak Rates			Actual			Projected a/		
		1965-1966	1973-1974	1978-1979	1980	1981	1982	1983	1984	1985
Aerospace, etc.	73	92	76	91	89	81	71	68	74	83
Instruments	82	90	88	90	86	83	77	75	82	88
Electrical Equip.	83	97	87	89	84	84	77	81	84	85
Fabricated Metals	79	87	85	88	79	79	66	67	74	78
Nonferrous Metals	85	100	96	92	81	83	67	76	82	90
Iron & Steel	84	94	97	89	73	80	51	60	76	85
Total Manufacturing	83	91	88	86	80	79	71	75	80	83

a. Projections assume defense spending consistent with the First Budget Resolution and CBO's August forecast.